

## A Message From Vice President Al Gore

As this Administration and America move forward to embrace the challenges Of the 21st Century, it remains vitally important that the federal government lead by example. Four years ago, President Clinton asked me to pilot an effort to "reinvent Government." Since then, with the help of our National Performance Review Team, federal agencies have found ways to cut spending, reduce bureaucracy, eliminate cumbersome regulation, and change the very nature of how the government relates to the people.

We, as stewards of our nation's heritage, have a responsibility to demonstrate methods and technologies for pollution prevention, waste reduction, and the efficient use and management of our natural resources. The federal government, as the nation's single largest consumer of products and services, has an opportunity to direct our purchasing power as it relates to environmental management.

To that end, on October 20, 1993, the President issued Executive Order 12873, 'Federal Acquisition, Recycling, and Waste Prevention.' This Executive Order helps to weave responsible environmental management into the fabric of federal activity by harnessing the government's purchasing power, incorporating environmental considerations into decision making, and encouraging waste prevention and recycling into daily operations. Since then, we have seized the leadership role by identifying champions at each federal agency and implementing the initiatives the order identified. Officials at the Office of the Federal Environmental Executive, together with a team of Agency Environmental Executives, have promulgated the goal of the Executive Order: "To establish the United States Government as a leader, both domestically and internationally, in waste reduction, source separation, and the procurement of recycled content products."

Federal employees have demonstrated that through affirmative procurement, we can create markets for recovered materials and environmentally preferred products and services, spur competition, create business and employment opportunities, and enhance local and regional economies. We celebrate federal employee empowerment and environmental innovation with the annual White House "Closing the Circle Award" competition. I commend the many recipients of this award and want them and you to know that we are proud of their success in achieving environmental excellence in government. However, as we pause to congratulate each other, we must not rest on the laurels of our successes—we still face challenges as we continue to reinvent government. Your continued motivation and commitment are essential to the future of an even greater and "greener" 21st century America.

Vice President of the United States  
Al Gore



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# FOREWORD

## Initiatives in the United States

The United States Government has pledged to lead the Nation by example, to protect human health and the environment, and to ensure the United States Government lives under the same environmental and energy laws it makes for its people. To ensure uniform implementation, these policies are reflected in the Nation's laws, embodied in several Executive orders, and supported by numerous agency directives and policies.

### Policies

**Pollution** Prevention: It is the national policy of the United States that, whenever feasible, pollution should be prevented or reduced at the source. Pollution which cannot be prevented should be recycled in an environmentally safe manner. Pollution which cannot be prevented or recycled should be treated in an environmentally safe manner. Further, disposal into the environment should be a last resort and conducted in an environmentally safe manner. The U.S. Government's general pollution prevention policy should be achieved through "source reduction" and other practices reducing or eliminating pollutant creation through increased efficiency in the use of raw materials, energy, water, or other resources, or through protection of natural resources by conservation. Source reduction is defined as any practice: (i) reducing the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and (ii) reducing the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants. An Assistant Secretary-level Interagency Task Force has been formed to oversee policy implementation and help set the long-term direction of the Government's pollution prevention efforts. The

Federal Government has set a goal for reducing toxic chemical releases into the environment from Federal facilities by 50% by the year 2000. To implement this and other pollution prevention goals, sixteen major Federal agencies have prepared pollution prevention strategies outlining agency pollution prevention programs, policies, and actions. Concurrently, over 5000 Federal facilities across the Nation and around the world have prepared pollution prevention plans to implement these policies at the field level. The environments review process established under the National Environmental Policy Act ensures against potential adverse impacts of proposed Government activities and suggests alternatives for consideration in the Government decision-making process.

This policy is established in the Pollution Prevention Act of 1990, supported by the National Environmental Policy Act, and reinforced by Executive Order 12856, "Federal Compliance With Right-to-Know Laws and Pollution Prevention Requirements."

Energy **and water** Use Reduction: The U.S. Government recognizes the significant environmental and economic benefits accompanying energy and water use reduction. The Federal Government actively promotes reduced energy and water consumption and increased water and energy efficiency at Federal facilities. The Federal

Government has set a goal to reduce waste consumption 30% by 2005 in Federal facilities. (The Federal Government is instituting comprehensive energy and water audits at Federal facilities.)

Since this program started, 22 Federal agencies have pledged to exceed the goal established by Federal standards. This will be accomplished by purchasing products from among those tested and found to be most energy and water efficient (rated in the upper 25%) or at least 10% more efficient than the minimum levels set by Federal standards and by implementing environmentally beneficial landscaping practices at Federal facilities. Each of these efforts is supported by the Federal Energy Management Program in the US. Department of Energy

This policy is established in the Energy Policy Act of 1992 and is supplemented by Executive Order 12902, Energy Efficiency and Water Conservation at Federal Facilities and the Executive Memorandum on Environmentally and Economically Beneficial Practices on Federal Landscaped Grounds.

**Affirmative Procurement:** Through its purchasing decisions, the Federal Government has the opportunity to realize significant economic and environmental benefits and has established a variety of policies to satisfy this goal. Previously issued policies targeted efforts to ensure the Government's acquisition and procurement of products and services required by E.O. 12873. The result and processes recognize and affirm environmental policies and goals and stimulate markets for products meeting those goals and policies. These include:

**Recycling and Waste Prevention:** The Federal Government has established goals and policies for reducing solid waste and using recycled products at Federal facilities. The policies establish a clear linkage between programs to collect and supply materials for recycling and the need to design efficient and effective programs to procure products derived from recovered materials. In action, these policies conserve natural resources and energy and reduce the need to dispose of waste materials.

Currently, products that can be made with recovered materials are designated by the Environmental Protection Agency (EPA) and procuring agencies purchase those products with the highest recovered material level practicable. To date, 24 items have been designated as containing recovered materials (See Part 5, Sec. 502 for details) and 13 new items have been proposed. Further, 20 Government agencies have prepared "Affirmative Procurement Programs" outlining agency plans for implementing this policy. To assure this happens, each Federal agency has appointed an Agency Environmental Executive responsible for implementing this policy.

This policy is contained in the Resource Conservation and Recovery Act and is supported by Executive Order 12873, Federal Acquisition, Recycling, and Waste Prevention; see Appendix A for full text of Executive Order 12873 and Appendix B for a list of Agency Environmental Executives.

### ***Environmentally Preferable Products and Services:***

In an effort to broaden the environmental perspective on products and services provided to the Government, the U.S. has initiated a program to purchase environmentally preferable products (i.e., those products having fewer impacts on human health and the environment when compared to competing products that serve the same purpose). This program, in on-going development, is designed to analyze multi-variate environmental characteristics associated with a product or service. This program reflects the Federal Government's desire to shift from single medium evaluations (e.g., impacts to only air quality) to a multi-media approach. As a first step towards encouraging environmentally preferable products purchases by the Government, the EPA recently issued proposed guidance on environmentally preferred products and services acquisition in September 1995. The concepts and principles in this general guidance are being applied to specific product and service categories through pilot projects.

In addition to encouraging environmentally preferable product and service procurement, policies targeting recovered material and recycled products, and energy and water efficient products, the U.S. Government has incorporated into agency operating policies other environmentally beneficial objectives. These include; avoiding toxic or hazardous chemicals in products and services provided to the Government, encouraging use of alternative fueled vehicles, purchasing only energy efficient computer equipment, and avoiding procuring products containing ozone depleting substances. Executive agencies are currently reviewing and revising government specifications and standards for products and services to identify opportunities to eliminate or reduce environmentally harmful materials and substances and include other descriptive factors, such as recovered material content. Additionally, the U.S. Government actively supports the development of new, cost effective, innovative products and technologies that are more environmentally sound than current technologies.

The Federal Government is also incorporating environmentally sound principles, such as “life cycle cost analysis” and “total cost accounting” into the planning stages for projects designed to meet the goals and policies delineated in various environmental Executive orders and national policies. These tools consider the full environmental cost of products and services purchased by the Government beginning with the impacts of initial resource recovery to the ultimate disposal of the product.

This policy is included in all of the environmental Executive orders as well as various Government-wide directives and agency-specific policy documents.

**Community Right-to-Know:** The Federal Government implements “Community Right-To-Know” policies ensuring that all government installations serve as good neighbors to the citizens and communities surrounding those facilities. To protect the public in the event of an acci-

dental release of hazardous chemical substances in the community, Federal facilities work with local governments on emergency planning and preparedness. Federal facilities also publicly provide information to the community regarding potentially hazardous chemicals and substances at facilities. The Government requires that those entities provide a service or product to certify compliance with community right-to-know requirements.

These policies are reflected in the following: Emergency Planning and Community Right-to-Know Act of 1986; Executive Order 12856, Federal Compliance With Right-to-Know Laws and Pollution Prevention Requirements; and Executive Order 12969, Federal Acquisition and Community Right-To-Know.

**Environmental Management:** Beyond the specific directives and guidance issued for Government agencies, many agencies have elected to employ environmental policy mechanisms to ensure their prospective actions affecting public health and the environment are taken into consideration. These actions include management systems designed to ensure that environmental considerations become part of the philosophy in the normal operations of Government agencies at all levels. To ensure consistent implementation of environmental management systems across the Government, the EPA has established a “Federal Government Environmental Challenge Program” to recognize agencies and individual facilities with outstanding environmental management programs. Under this program, EPA has drafted a Federal Code of Environmental Management Principles, currently under review by other Federal agencies. In addition, EPA will encourage Federal agencies to use benchmarking techniques to measure their environmental programs against other agencies or private sector counterparts. Federal agencies are also being urged to develop or improve upon existing environmental audit procedures including their environmental management systems audits. Benchmarking activities complimented by both environmental compliance and environmental management will allow Government facilities to improve both environmental compliance and overall performance.





# INTRODUCTION

As was detailed in the previous section, a number of Executive Orders have been issued by President Clinton designed to improve the environmental performance of the Federal Government, including: 12856, Federal Compliance With Right-to-Know Laws and Pollution Prevention Requirements; 12873, Federal Acquisition, Recycling, and Waste Prevention; 12902, Energy Efficiency and Water Conservation at Federal Facilities; 12843, Procurement Requirements and Policies for Federal Agencies for Ozone-Depleting Substances; 12844, Federal Use of Alternative Fueled Vehicles; 12845, Requiring Agencies to Purchase Energy Efficient Computer Equipment; and 12969, Federal Acquisition and Community Right-to-Know.

This document has been prepared by the Office of the Federal Environmental Executive to familiarize Federal agencies with Executive Order 12873 and help them understand its intent. More importantly, this booklet is intended to help people do what the President has directed by providing a straight-forward explanation of the requirements and information on the best ways to comply with the Executive Order.

The Federal Government has had a mandate to “Buy Recycled” for nearly 20 years under the Resource Conservation and Recovery Act (RCRA) of 1976, yet our success has been limited. However, President Clinton’s Executive Order 12873 reaffirms the Federal Government’s commitment to buy recycled. The purpose for this users’ guide is to lay out clearly the linkage among the acquisition, recycling, and waste prevention activities mandated by law and Executive Order. This includes guidance on the prevention of waste wherever practical, the recycling of materials whenever possible, and

finally the acquisition of goods manufactured from collected materials.

The purpose of this guide is to describe not only requirements in law (RCRA) and the Executive Order, but also the benefits to those achieving compliance. The audience for this document includes agencies at the local, state, and Federal levels using Federally appropriated funds. Within these agencies, the Agency Environmental Executive, recycling and facilities managers, agency supply personnel, specification writers, purchasing officials, and product users will find this guidance most useful. The following “Parts” correspond to the various sections and requirements of Executive Order 12873. The most relevant subsections of the Executive Order have been re-printed at the beginning of each part. Further, each part provides systematic guidance on implementing that portion of the order.

“Buying recycled” and reducing waste are not only required by law and the Executive Order, but are usually sound business practices. One common myth about recycled products is that they are inferior. Most recycled products meet the same technical and quality specifications as their virgin counterparts and may provide superior characteristics. There are a number of reasons why procuring agencies should reduce waste and/or buy recycled products:

- **Save Money - In the long run, buying recycled, recyclable, and waste-reduced products can reduce Government costs, especially if life-cycle analysis is applied.**
- **Create Jobs and Economic Development Opportunities -According to a recent study by the Massachusetts Department of Economic Development, recycling industries added \$588 million to the State’s economy and created 10,000 jobs. To maintain and expand**

recycling industries, end markets for recycled products are needed. Buying recycled products helps create these end markets.

- **Conserve Resources and Energy - Buying** recycled products and reducing waste reduces dependence on virgin materials. Use of recycled feedstocks often saves more energy than the use of virgin manufacturing processes, thereby reducing material resulting in pollution.
- **Create New Markets** - Buying recycled content products helps create long-term, stable markets for recyclable materials and helps improve revenues from recycling programs.
- **Reduce the Disposal of Recyclable Materials - Recycled** content products create markets, further stimulating recovery of materials and decreasing the amount of materials being disposed to landfills and combustion facilities.
- **Convince Manufacturers to Use More Recovered Materials - In order** to use recovered materials, manufacturers must invest substantial capital in processing and other equipment. To support the investments, there must be a demand for the finished recycled content products. Buying recycled content products helps create that demand.

Manufacturing is driven by the marketplace. If a demand exists for recycled content products, manufacturers will make those products. It's as simple as that. Without sufficient economic incentive, manufacturers may not invest in recycling, even if it is the "right thing to do." The marketplace potential for recycled goods is expanding rapidly. More and more products made from recycled material are available. The most immediate recycling challenge today is to educate consumers about the benefits of buying recycled and change consumer buying habits, especially those of large institutional buyers. And the Federal Government is the largest of all!

- **Provide a Proactive Rather Than a Reactive Approach to the Waste Management Problem** - Proactively establishing "Buy Recycled" programs allows Government **agencies** to design programs that meet their specific needs, rather than reacting to more restrictive legislation in the future.
- **Set an Example for the Private Sector-Since** Government purchases represent 20% of the Gross National Product (GNP), Government agencies can lead the Buy Recycled effort by setting an example for the private sector. Public agencies can also demonstrate product performance and lead the way in developing product specifications.
- **Enhance Organization's Image** - Buying recycled products can foster goodwill among employees and citizens.

In other words, buying recycled, recyclable, and waste-reduced products is a win-win proposition for the Government, the taxpayers, and for **the nation** as we conserve and use our natural resources wisely.







# Part I Preamble

## *Sec. 101.*

*Consistent with the demands of efficiency and cost effectiveness, the head of each Executive agency shall incorporate waste prevention and recycling in the agency's daily operations and work to increase and expand markets for recovered materials through greater Federal Government preference and demand for such products.*

## *Sec. 102.*

*Consistent with policies established by Office of Federal Procurement Policy ("OFPP") Policy Letter 92-4, agencies shall comply with Executive branch policies for the acquisition and use of environmentally preferable products and services and implement cost-effective procurement preference programs favoring the purchase of these products and services.*

## *Sec. 103.*

*This order creates a Federal Environmental Executive and establishes high-level Environmental Executive positions within each agency to be responsible for expediting the implementation of this order and statutes that pertain to this order.*

On October 20, 1993, President Clinton addressed the need to develop and support markets for recovered materials when he signed Executive Order 12873. The order was designed to foster and strengthen Federal response to existing laws to reduce solid waste, build markets for recycled products, encourage new technologies, and protect the environment by increasing purchases of recycled content products. The President laid out three program "touchstones:" (1) preventing waste wherever practical and feasible; (2) recycling; and (3) procuring recycled content and other environmentally preferable products. The Executive Order establishes a new and clear linkage between government programs to collect and supply materials for recycling and the need to design efficient and effective programs to purchase products composed of those recovered materials.

Legislation regulating the purchase of recycled content products has been evolving since 1976, when Congress established a buy recycled policy (RCRA 5 6002; 42 U.S.C. 6962). Since then, state and local governments throughout the country have enacted similar policies. In 1986, only 13 states and a handful of local governments had buy recycled laws. Now, at least 45 states, the District of Columbia, and more than 500 local governments have established legal requirements to purchase recycled content products. Additionally, more than 2,500 businesses across the country have made a significant environmental impact by increasing their purchases of recycled content products and materials.

*The full text of Executive Order 12873 can be found in Appendix A.*

In Section 6002 of RCRA, Congress directed Government agencies to promote recycling by increasing their purchases of products containing recovered materials. RCRA requires the EPA to designate products that can be made with recovered materials and to recommend practices for buying these products. Once a product is designated, procuring agencies are required to purchase that product with the highest recovered material content level practicable.

By 1989, EPA had designated five products or product categories: cement and concrete containing coal fly ash, paper and paper products, re-refined lubricating oils, retread tires, and building insulation products. In 1995, EPA issued the *Comprehensive Procurement Guideline* (CPG), which designated 19 new items containing recovered materials. EPA also issued a *Recovered Materials Advisory Notice (RMAN)* recommending recycled content ranges and procurement practices for each product. The addition of 13 new items containing recovered material was proposed by the EPA in the

At the Blue River Ranger Station, Willamette National Forest, Oregon, a total recycling program was an award winner. They succeeded in separating out a variety of undesirable products from the hazardous waste stream, including tires, hydraulic fluid, and antifreeze.

November 7, 1996 Federal Register (61 FR 57747). A list of all 37 items and the minimum content standards are included in Part 5. A list of the items and the minimum content standards are included in Part 5.

Since 1989, other Executive orders and Office of Management and Budget (OMB) circulars have sought to stimulate better Federal response to these requirements. Executive Order 12873 updated and reaffirmed all of the previous efforts.

Throughout this document you will see this symbol showing excellent examples of recycling, waste prevention, and/or affirmative procurement programs. These programs are all winners of the White House Closing the Circle Award. (see part 8 for more details)







## Part 2 Definitions

### Sec. 201.

*"Environmentally preferable" means products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service.*

### Sec. 202.

*"Executive agency" or "agency" means an Executive agency as defined in 5 U.S.C. 105. For the purpose of this order, military departments, as defined in 5 U.S.C. 102, are covered under the auspices of the Department of Defense.*

### Sec. 203.

*"Postconsumer material" means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item.*

*"Postconsumer material" is a part of the broader category of "recovered material".*

### Sec. 204.

*"Acquisition" means the acquiring by contract with appropriated funds for supplies or services (including construction) by and for the use of the Federal Government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, or demonstrated and evaluated. Acquisition begins at the point when agency needs are established and includes the description of requirements to satisfy agency needs, solicitation and selection of sources,*

*award of contracts, contract financing, contract performance, contract administration, and those technical and management functions directly related to the process of fulfilling agency needs by contract.<sup>2</sup>*

### Sec. 205.

*"Recovered materials" means waste materials and by-products which have been recovered or diverted from solid waste, but such term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process (42 U.S.C. 6903 (19)).*

### Sec. 206.

*"Recyclability" means the ability of a product or material to be recovered from, or otherwise diverted from, the solid waste stream for the purpose of recycling.*

### Sec. 207.

*"Recycling" means the series of activities, including collection, separation, and processing, by which products or other materials are recovered from the solid waste stream for use in the form of raw materials in the manufacture of new products other than fuel for producing heat or power by combustion.*

### Sec. 208.

*"Waste prevention," also known as "source reduction," means any change in the design, manufacturing, purchase, or use of materials or products (including packaging) to reduce their amount or toxicity before they become municipal solid waste. Waste prevention also refers to the reuse of products or materials.*

While not specifically stated in the Executive Order, the term "acquisition" is intended to include the requisition process Federal activities use to obtain products from established supply sources (e.g., The Defense Logistics Agency, DLA, and General Services Administration, GSA). The use of terms relative to procurement and purchasing should not be construed to mean the requirements of this Executive Order and various environmental laws, regulations, and other orders are not applicable to the supply community. The term acquisition, in its broad definition, encompasses all means of obtaining products or services. The Federal Property Management Regulations (FPMRs) contain guidance for the sequence of sources to be checked to satisfy requirements. It has never been the intention of any of the environmental laws, orders, etc., to circumvent the FPMRs and lay the responsibility of compliance solely on contracting officers. Everyone involved in the process is responsible for environmental considerations, starting with those stating the requirements and continuing through supply channels or procurement/contracting channels, whichever applies.



Sec. 209.

*"Waste reduction" means preventing or decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products.*

Sec. 210.

*"Life Cycle Cost" means the amortized annual cost of a product, including capital costs, installation costs, operating costs, maintenance costs, and disposal costs discounted over the lifetime of the product.*

Sec. 211.

*"Life Cycle Analysis" means the comprehensive examination of a product's environmental and economic effects throughout its lifetime including new material extraction, transportation, manufacturing, use, and disposal.*

## Help for purchasers and manufacturers of products with environmental attributes

The Federal Trade Commission (FTC) has issued new guidelines for use by manufacturers making environmental claims about their products in marketing and advertising approaches. Although these guides are not legislative rules, they do provide the basis for voluntary compliance with Section 5 of the FTC Act regarding this issue. The guidelines address specific legal issues by providing case study examples and relative analysis and judicial rulings. This format is very user-friendly and provides valuable information to both the manufacturer and purchaser of such products. These guidelines may be found in Appendix 1.

## What is a recycled product?

A product made in whole or in part from material recovered from the waste stream. Many "recycled products" contain less than 100 percent recovered materials. Therefore, they are more accurately referred to as recycled content products. Examples include a rebuilt or remanufactured commodity, such as a rebuilt engine or a remanufactured laser toner cartridge, plastic lumber, recycled paper, etc.